

	L #	Hits	Search Text	DBs	Time Stamp
1	L1	149121	(intermit\$5 pulse pulsed pulsing) near3 (plasma voltage current)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/03/17 16:07
2	L2	4285	(427/569-579,562-564,530).C CLS.	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/03/17 16:03
3	L3	1346	(118/723E-723IR).CCLS.	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/03/17 16:04
4	L4	275	1 and (2 or 3)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/03/17 16:04
5	L5	184222	boron boride "Bcl.sub.3" "BF.sub.3" "BX.sub.3"	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/03/17 16:06

*SN09/594,905*

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	L #	Hits	Search Text	DBs	Time Stamp
6	L6	65	4 and 5	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/03/17 16:06
7	L7	157409 8	pulse near 3 (duration period pause)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/03/17 16:08
8	L8	54	6 and 7	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/03/17 16:08
9	L9	11	6 not 8	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/03/17 16:08

corrector

L 10 110361 near 3  
 L 11 ~~6 not 11~~  
 L 12 6 and 10 28

	Document ID	Issue Date	Title	Current OR	Inventor
1	US 200100412 30 A1 [0019] Bonding... 1-10 mbar plasma may be pulsed or un-pulsed	20011115 371 → 1/23/97	Process for producing wear-resistant boride layers on metallic material surfaces	427/569	<i>related to patent</i> Hunger, Hans-Jorg et al.
2	US 6342277 B1	20020129	Sequential chemical vapor deposition	427/562	Sherman, Arthur
#1 3	US 6335536 B1	20020101 10/99	Method and apparatus for low voltage plasma doping using dual pulses	250/492.3	Goeckner, Matthew J. et al.
4	US 6306225 B1	20011023	Process for producing wear-resistant boride layers on metallic material surfaces	148/241	Hunger, Hans-Jorg et al.
5	US 6281147 B1	20010828	Plasma CVD method	438/788	Yamazaki, Shunpei et al.

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	Document ID	Issue Date	Title	Current OR	Inventor
6	US 6200651 B1	20010313	Method of chemical vapor deposition in a vacuum plasma processor responsive to a pulsed microwave source	427/571	Roche, Gregory A. et al.
#2 7	US 6182604 B1	20010206 10/29	Hollow cathode for plasma doping system	118/723E	Goeckner, Matthew J. et al.
8	US 6162709 A	20001219	Use of an asymmetric waveform to control ion bombardment during substrate processing	438/513	Raoux, Sebastien et al.
<p>Alb5 - bipolar pulsed DC voltage H<sub>2</sub>O<sub>3</sub> counter turbo</p> <p>proof date pulsed app-ong</p> <p>#3 9</p>	US 6139921 A	20001031 11/23/98	Method for depositing fine-grained alumina coatings on cutting tools	427/576	Taschner, Christine et al.
10	US 6136388 A	20001024	Substrate processing chamber with tunable impedance	427/569	Raoux, Sebastien et al.



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	Document ID	Issue Date	Title	Current OR	Inventor
16	US 6055928 A	20000502	Plasma immersion ion processor for fabricating semiconductor integrated circuits	118/723E	Murzin, Ivan Herman et al.
17	US 6041734 A	20000328	Use of an asymmetric waveform to control ion bombardment during substrate processing	118/723E	Raoux, Sebastien et al.
18	US 6015762 A	20000118	Plasma CVD method	438/788	Yamazaki, Shunpei et al.
19	US 5988103 A	19991123	Apparatus for plasma source ion implantation and deposition for cylindrical surfaces	118/723E	Fetherston, Robert P. et al.

	Document ID	Issue Date	Title	Current OR	Inventor
(D) Figs. 4 shows... duration of pulses typically 50-500 $\mu$ sec duty cycle	US 5983828 A	19991116 eff. date 1/18/00 good	Apparatus and method for pulsed plasma processing of a semiconductor substrate	118/723I	Savas, Stephen E.
X Boron neutron is backscattering list good	US 5981078 A	19991109 good not published 2/27/97	Composite body and process for its production	428/457	Tabersky, Ralf et al.
(D) Adjoining of PECVD in DE... possible 200-900V, pulse duration 20 $\mu$ sec - 20 msec					
	US 5935461 A	19990810	Pulsed high energy synthesis of fine metal powders	219/121.59	Witherspoon, F. Douglas et al.
(AB) pulsed laser assisted RF pulsed synchronized	US 5928528 A	19990727 9/24/97	Plasma treatment method and plasma treatment system	216/67	Kubota, Masafumi et al.
(D) the specimen A... BSC (boron... glass)	US 5900289 A	19990504	Method of producing a colorating coating	427/577	Hartmann, Rolf et al.
	US 5897713 A	19990427	Plasma generating apparatus	118/723I	Tomioka, Kazuhiro et al.

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	Document ID	Issue Date	Title	Current OR	Inventor
26	US 5883016 A	19990316 4/96 → CIP on 5/509, 27	Apparatus and method for hydrogenating polysilicon thin film transistors by plasma immersion ion implantation	438/798	Chan, Chung et al.
27	US 5837331 A	19981117 3/96 BN	Amorphous multi-layered structure and method of making the same	427/569	Menu, Eric P. et al.
28	US 5693376 A	19971202	Method for plasma source ion implantation and deposition for cylindrical surfaces	427/523	Fetherston, Robert P. et al.



	Document ID	Issue Date	Title	Current OR	Inventor
#12 29	US 5654043 A	19970805	Pulsed plate plasma implantat ion system and method	427/527	Shao, Jiqun et al.
Figs. 5 ... B draws for BE3 (D) A pulsed modulation circuit for ... pulsed discharge chamber to plasma development of glow dis.					
30	US 5630880 A	19970520	Method and apparatus for a large volume plasma processor that can utilize any feedstock material	118/723MP	Eastlund, Bernard J.
#12 III 31 #5 = #13	US 5626922 A	19970506	Plasma processin g method	427/535	Miyanaga, Akiharu et al.

	Document ID	Issue Date	Title	Current OR	Inventor
#14	US 5607264 A	19970304	Tool with diamond cutting edge having vapor deposited metal oxide layer and a method of making and using such tool	407/118	Konig, Udo et al.
#15	US 5587233 A	19961224	Composite body and its use	428/325	Konig, Udo et al.
#16	US 5587207 A	19961224	Arc assisted CVD coating and sintering method	427/571	Gorokhovs ky, Vladimir I.
	US 5558718 A	19960924	Pulsed source ion implantation apparatus and method	118/723E	Leung, Ka-Ngo

mainly apparatus.

No Pulsed plasma CVD

(AD) Plasma active pulsed w/pulsed Direct voltage  
Bar due in Badger test

(Blue sensor data 20µs-20ms)

BN

	Document ID	Issue Date	Title	Current OR	Inventor
#17 36	US 5547716 A	19960820	Laser absorptio n wave depositio n process and apparatus	427/577	Thaler, Stephen L.
#18 37	(AB) plasma activated US 5516588 A	19960514	Composite body, its use and a process for its productio n  but see claim	428/469	van den Berg, Hendrikus et al.
#19 38	(AB) cBN US 5503913 A	19960402	Tool with wear-resi stant cutting edge made of cubic boron nitride or polycryst alline cubic boron nitride, a method of manufactu ring the tool and its use	428/216	Konig, Udo et al.
39	US 5397428 A	19950314	Nucleatio n enhanceme nt for chemical vapor depositio n of diamond	117/86	Stoner, Brian R. et al.

#20

STP  
(B) On Time ...  $BF_3$  plasma  
(D) The pure  $PI_3$  ... pulse- $PI_3$   
 $BF_2$ ...

	Document ID	Issue Date	Title	Current OR	Inventor
40	US 5354381 A	19941011	Plasma immersion ion implantation (PI.sup.3) apparatus	118/723E	Sheng, Terry T.

#21

pulse HF

41	US 5304407 A	19940419	Method for depositing a film	427/569	Hayashi, Shigenori et al.
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#22

$BF_3$

42	US 5289010 A	19940222	Ion purification for plasma implantation	250/492.21	Shohet, Juda L.
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#23

over

43	US 5192578 A	19930309	Method of producing coating using negative DC pulses with specified duty factor	427/576	Ramm, Jurgen et al.
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#24

44	US 5173328 A	19921222	Plasma CVD process for coating a basic metallic body with a non-conductive coating material	427/576	Reiter, Norbert et al.
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	Document ID	Issue Date	Title	Current OR	Inventor
45	US 5130170 A	19920714	Microwave PCVD method for continuously forming a large area functional deposited film using a curved moving substrate web with microwave energy with a directivity in one direction perpendicular to the direction of microwave propagation	427/575	Kanai, Masahiro et al.
#25 46	US 5098483 A	19920324	Methods of treating spherical surfaces	423/497	Little, Roger G. et al.
poor #26 47	US 5078848 A	19920107	Procedure and apparatus for the coating of materials by means of a pulsating plasma beam	204/192.38	Anttila, Asko et al.

(D) Instead of vacuum ...  
kms Rx → BN

	Document ID	Issue Date	Title	Current OR	Inventor
48	US 4937205 A	19900626	Plasma doping process and apparatus therefor	438/513	Nakayama, Ichiro et al.
49	US 4937094 A	19900626	Method of creating a high flux of activated species for reaction with a remotely located substrate	427/574	Doehler, Joachim et al.
50	US 4883686 A	19891128	Method for the high rate plasma deposition of high quality material	427/562	Doehler, Joachim et al.
#29 51	US 4764394 A	19880816	Method and apparatus for plasma source ion implantation	427/525	Conrad, John R.
52	US 4762756 A	19880809	Thermochemical surface treatments of materials in a reactive gas plasma	428/698	Bergmann, Erich et al.

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	Document ID	Issue Date	Title	Current OR	Inventor
53	US 4645895 A	19870224	Method and apparatus for surface-treating workpieces	219/76.13	Boxman, Raymond L. et al.
54	US 4568563 A	19860204	Optical fibre manufacture	427/538	Jackson, Thomas M. et al.